

## Examrace

# Schools of Thought Part 9: Cattell, Tichener, Reductionism, Functionalism and Elementarism for Competitive Exams

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### James Mckeen Cattell

- Known for his work on individual differences and “Mental Tests” .

### Edward Bradford Tichener

- American psychologist, who was English by birth, but German in professional and personal temperament, who spent his most productive years in Cornell University, New York.
- He was solely concerned with studying the brain, and the unconscious, and for this he believed, we should break it down into basic elements. After that, we can construct the separate elements into a whole and understand what it does.
- He believed that we can study perception, emotions and ideas through introspection, by reducing them to their elementary parts.
- There are four elements in the sensation of taste:
  - Sweet
  - Sour
  - Salty
  - Bitter
- Ideas and images are related: ideas were always accompanied by images
- The underlying process in emotions was affection Criticism
- Known as the formal founder of Structuralism

This school of thought has been criticized on various grounds i.e..

### It Was Reductionism

- It reduced all complex human experience to simple sensations

### It Was Elementaristic

- The structuralists sought to look at individual elements first, and then combine parts into a whole, rather than study the variety of behavior directly.

### **It Was Mentalistic**

- Structuralism studied only verbal reports of human conscious experience and awareness, ignoring the study of subjects who could not report their introspection.

### **Functionalism**

An approach that concentrated on what the mind does, in other words the functions of mental activity, and the role of behavior in allowing people to adapt to their environments. The functionalist psychologists start with the fact that objects are perceived and “how” they are perceived.

They asked “why” as well. This school became prominent in the 1900s. It emerged as a reaction to Structuralism.

- Founded by William James, also known as the founder of American Psychology.
- Emphasized “function” rather than “Structure” of human consciousness i.e., what the mind does
- Focused upon the way humans adapt to their environment; what roles behavior played in allowing people to better adapt to their environment
- Examined the ways in which behavior allows people to satisfy their needs
- Functionalists were especially interested in education and applied psychology

### **William James**

- He was the leading precursor of functionalist psychology. James was a Harvard University professor, primarily trained in physiology and medicine. Psychology and philosophy fascinated him, and he treated psychology as a natural science. In 1875 he offered his first course in psychology.
- In 1890 he published “Principles of Psychology”, a two-volume book, which became a leading psychology text in the U. S.
- James wrote about the stream of consciousness, emotions, the self, habit formation, mind-body link and much more. He was also interested in will, values, religious and mystical experiences. James said: “We should study consciousness but should not reduce it into elements, content and structure” .
- Acts and functions of mental processes need to be focused upon, rather than contents of the mind. Consciousness was an ongoing stream, and was in continual interaction with the environment. Careful observation is important; Wundt’s rigorous laboratory methods are of little value.

- James believed that each individual has a uniqueness that could not be reduced to formulas or numbers

## John Dewey

- Famous American educator
- One of the key founders of “Functionalism”
- Stimulus – Response phenomenon is not an automatic behavior, the goal of the person performing it has the main role in it; the stimulus and the response determine each other
- It is the function, or the goal, of the whole action that elicits response
- Dewey developed the field of ‘School Psychology’ and recommended ways for meeting student’s needs
- Teachers are strongly influenced by their psychological assumptions about children and the educational process Teachers need to understand two issues:
  - Children and adults are different; teaching/education should be in accordance with children’s developmental readiness.
  - Children are similar to adults in the sense that they perform better when they have some control over what they are to accomplish; the curriculum should be designed accordingly.

## Applied Psychology Flourished Following the Emergence of Functionalism

- James Mckeen Cattell began studying ways to measure intelligence
- Psychology entered the world of business; Frederick Taylor developed ‘scientific management’
- Other functionalists: James Rowland Angell, Harvey A. Carr

## James Rowland Angell

- Founded the psychology department in Chicago, the most influential of its time.
- Believed that the function of consciousness is to improve the adaptive abilities of the organism and that psychology must study how mind did these kinds of adjustments with respect to the environment.